

## **REMARKS/ARGUMENTS**

### **1.) Incomplete Office Action**

The Applicants note that the Examiner did not express any basis of rejection in the present office action for claims 36 and 37, which the Examiner previously rejected as unpatentable over Cheng, *et al.* (U.S. Patent Publication No. 2003/0224774) in view of Love, *et al.* (U.S. Patent Publication No. 2004/0219917). The Applicants, however, will treat the present office action as having maintained that rejection.

The Examiner, however, also did not express any basis of rejection in the present office action for claim 45. In the prior office action, the Examiner asserted that claims 44 and 45 were anticipated by Schramm, *et al.* (U.S. Patent No. 6,542,742). In the present office action, the Examiner asserts that claim 44 is anticipated by Cheng, but fails to state any basis for rejection of claim 45. Thus, the present office is incomplete and, accordingly, the finality should be withdrawn. The Applicants request that the Examiner clarify all bases of rejection in any future office action(s).

### **2.) Claim Rejections – 35 U.S.C. §102(b)**

The Examiner rejected claims 25, 33 and 44 as being anticipated by Cheng, *et al.* (U.S. Patent Publication No. 2003/0224774). The Applicants traverse the rejections.

It is to be remembered that anticipation requires that the disclosure of a single piece of prior art reveals every element, or limitation, of a claimed invention. Furthermore, the limitations that must be met by an anticipatory reference are those set forth in each statement of function in a claims limitation, and such a limitation cannot be met by an element in a reference that performs a different function, even though it may be part of a device embodying the same general overall concept. Whereas Cheng fails to anticipate each and every limitation of claims 25, 33 and 44, those claims are not anticipated thereby.

Claim 25 recites:

25. A method for a cellular mobile communications system, comprising the steps of:

selecting an active set of base stations from a plurality of base stations, wherein each base station in said active set is capable of providing parallel radio links with a mobile station;  
transmitting a packet from the mobile station on a radio uplink;  
transmitting, from each of the base stations of the active set to the mobile station, a measure of the quality of the radio uplink made during receipt of said packet;  
selecting, by said mobile station, only one base station from the active set of base stations based upon said quality measures;  
transmitting information identifying the selected base station from the mobile station; and,  
forwarding the previously-received packet on a fixed link only from the selected base station. (emphasis added)

As described at page 4, line 21, *et seq.*, the Applicants' invention is directed to allowing a mobile station to control uplink selection combining instead of having a combiner node in the fixed portion of the network. The mobile station transmits a packet on a radio uplink which, as those skilled in the art will recognize, can be received by multiple base stations. According to the principles of the invention, each of the base stations in an active set which receives the transmitted packet from the mobile station transmits a measure of the quality of the radio uplink made during receipt of the packet. In response to receiving radio uplink quality measurements from each base station which receives a packet, the mobile station identifies only one of the base stations which should forward a received packet on the base stations fixed link to the network. The mobile station transmits information identifying the selected base station. A base station that previously received a packet from the mobile station, and which receives the information identifying it as the selected base station, then forwards the packet on its fixed link to the network. Cheng fails to teach that combination of functions.

As the Applicants have previously noted, Cheng is directed to a handoff mechanism. It is inherent in such a mechanism that a mobile station can simultaneously transmit signals that are received by more than one base station. The process described by Cheng, however, is directed solely to handing over communication between a mobile station and a first base station to a second base station. The Applicants' invention is directed to eliminating the need for a conventional combiner in the network; a combiner is typically used to perform error checking on received radio

frames and selects the one that has been received error free. In contrast to such conventional combiners in the fixed portion of the network, the Applicants' invention provides functionality that allows a mobile station to select which of a plurality of receiving base stations will forward received packets to the fixed portion of the network. That functionality is not disclosed by Cheng, nor has the Examiner addressed that distinction in the present Final Office Action. Regardless of whether "Cheng's invention is not using any conventional combiner in the fixed portion of the network," as asserted by the Examiner in the present office action, the Examiner has not pointed to any teaching therein of a mobile station selecting which of a plurality of base stations will forward received packets to the fixed portion of the network. Because the teachings of Cheng relate to the handover from one base station to another, it is possible that Cheng did not consider it necessary to discuss the use or functions of a combiner; a lack of such disclosure, however, is an insufficient basis to state that Cheng discloses the functionality of Applicants' invention that obviates the need for such a combiner.

Referring to Figure 2, Cheng discloses a series of packets that are sent in sequential time slots; the first packets (14-15) are sent to cell/RBS A and the next packets (16-19) are sent to cell/RBS B. This is described in paragraph 0006, as referred to by the Examiner:

[0006] The present invention is a process and system for the transmission of data packets on a reverse link between a mobile station and a group of selectable cells (base stations or sectors). A request to make a handoff from a first cell to a second cell within a group of selectable cells is transmitted from the mobile station to the active set. During a cell switching delay, occurring between the request and the beginning of reception of data packets from the second cell, data packet retransmissions and acknowledgement are sent between the first cell and the mobile station. After handoff is complete, data packets are transmitted from the mobile station to the second cell.

Thus, paragraph 0006 confirms that a handoff is made before the mobile station switches its transmission from the first cell (A) to the second cell (B). Furthermore, there is no teaching in Cheng of a copy of a packet waiting in two or more base stations and, thus, no teaching therein of a mobile station that selects, as a function of quality measures, which of the receiving base stations (i.e., those base stations in the active set that receive a packet) will forward received packets to the fixed portion of the network, as recited in claim 25. Therefore, claim 25 is not anticipated by Cheng. Whereas independent claims 33 and 44 recite analogous limitations, they are also not anticipated by Cheng.

Furthermore, whereas claims 26 and 30 are dependent from claim 25, claims 41 and 42 are dependent from claim 33, and claim 45 is dependent from claim 44, and include the limitations of their respective base claims, they are also not anticipated by Cheng.

### 3.) Claim Rejections – 35 U.S.C. §103(a)

The Examiner rejected claims 28, 29, 38, 40 and 43 as being unpatentable over Cheng in view of Longoni, *et al.* (U.S. Patent No. 6,493,564), and claims 27, 31, 32 and 39 as being unpatentable over Cheng in view of Baker, *et al.* (U.S. Patent Publication No. 2002/0119778). With respect to the remaining claims, the Examiner's stated bases for rejection are inconsistent with the prior Office Action. In the present action, the Examiner has rejected claims 34 and 35 as being unpatentable over Cheng in view of Love, *et al.* (U.S. Patent Publication No. 2004/0219917), although the prior action rejected those claims as being unpatentable over Cheng in view of Virtanen. Similarly, the Examiner has rejected claims 46 and 47 as being unpatentable over Cheng in view of Haas (U.S. Patent No. 5,774,814), while in the prior action he rejected those claims over Schramm in view of Haas. Lastly, the Examiner has rejected claim 48 as being unpatentable over Cheng in view of Kondo (U.S. Patent No. 5,722,080), while the prior action rejected that claim as unpatentable over Schramm in view of Kondo.

As established *supra*, independent claims 25, 33 and 44 are not anticipated by Cheng. Furthermore, nothing in Cheng would render claims 25, 33 and 44 obvious. Therefore, whereas claims 27-29, 31, 32, 34-40, 43 and 46-48 are dependent from those claims, and include the limitations thereof, they are also not obvious over Cheng in view of the teachings of Longoni, Baker, Love, Haas or Kondo, either individually or in combination.

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### **CONCLUSION**

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 25-48.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

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